USAFA-TR-89-5

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SOVIET COUNTERTRADE

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SEPTEMBER 1989

FINAL REPORT

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

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UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			
4. PERFORMING ORGANIZATION REPORT NUMBER(S) USAFA-TR-89-5		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION Department of Economics and Geography, Dean of the Faculty	6b. OFFICE SYMBOL (If applicable) HQ USAFA/DFEG	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State and ZIP Code) U.S. Air Force Academy CO 80840-5701		7b. ADDRESS (City, State and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNDING NOS.	
		PROGRAM ELEMENT NO. | PROJECT NO. | TASK NO. | WORK UNIT NO.	
11. TITLE (Include Security Classification) Soviet Countertrade (Unclassified)			
12. PERSONAL AUTHOR(S) Waller, Robert L., Lt Col			
13a. TYPE OF REPORT Final	13b. TIME COVERED FROM ______ TO ______	14. DATE OF REPORT (Yr., Mo., Day) SEP 1989	15. PAGE COUNT 41
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES FIELD | GROUP | SUB. GR.		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

Western observers have noted the Soviet Union's use of countertrade over the past several years. This type of international trade involves a seller's agreement to make some form of reciprocal purchase from or investment in the buyer's country before the buyer agrees to make the initial purchase.

After defining the terms often used in relation to countertrade, this paper develops the theory that would explain a government's use of this type of trade. The paper concludes with an application of the theory to the Soviet Union--an analysis of the motives behind the Soviet Union's use of countertrade-type transactions.

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT ☒ DTIC USERS ☐	21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL Lt Col Robert L. Waller	22b. TELEPHONE NUMBER (Include Area Code) (719) 472-3080	22c. OFFICE SYMBOL HQ USAFA/DFEG

DD FORM 1473, 83 APR EDITION OF 1 JAN 73 IS OBSOLETE.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

SOVIET COUNTERTRADE

I. Introduction and Terminology

The Soviets' use of countertrade has caught the attention of some in the West in the last few years. Countertrade transactions involve the seller's agreement to make some form of reciprocal purchase from or investment in the buyer's country before the buyer agrees to make the initial purchase. The purpose of this paper is to develop an understanding of the possible Soviet motives behind the use of this form of trade.[1]

To provide a better introduction to the types of transactions that are often included in a discussion of countertrade, we should first define the terms that are often used. The economic motives for using these techniques will be developed in Section II with Soviet applications discussed in Section III.

Countertrade ~~is that~~ set of bilateral international transactions which includes some element of reciprocity in which the seller compensates the buyer other than by price alone. Normally, the compensation is some form of

1. Sections I and II of this paper are based on the author's unpublished dissertation, The Principles of Countertrade, 1986.

reciprocal trade, commercial assistance, or investment, which benefits the buyer.

Barter--In its purest form, barter involves the exchange of goods or services for other goods or services, with no direct use of money.[2]

Counterpurchase--This type of countertrade transaction involves the cash purchase of goods from a supplier only after the supplier has agreed to make a cash purchase of goods from the buyer. The value of the counterpurchase demanded may be equal to the value of the initial purchase (a "100% counterpurchase") or it may be some fraction of the buyer's purchase. Often, the buyer stipulates that the items counterpurchased must be selected from a buyer-prepared list of goods, which are usually unrelated in nature to the initially purchased goods.

Evidence Accounts are modified counterpurchase arrangements where country B's purchases from country A are allowed to be automatically credited to an account against its current or future counterpurchase obligations. This arrangement is advantageous for B since B has more flexibility and time to "shop around" for more desirable and useful goods offered by A, and thus, B is not restricted to

2. Although money is not employed in its medium of exchange role, money is still indirectly used in an accounting unit function since at some point in the negotiations the value of the goods changing hands is evaluated independently by the two parties in a currency most familiar to each party.

such a limited list of items to fulfill its counterpurchase commitments.

<u>Buy-back</u> (also referred to as a compensation arrangement)--This form of countertrade normally involves the sale of technology, large capital equipment items, or even a completed, turnkey, plant or facility, where the seller agrees to buy back some of the resultant output. In some cases the buyer may even pay for the initial purchase over several years, with output produced by the plant, equipment or technology.

<u>Offset</u>--Often used with respect to large capital purchases, or purchases of civilian aircraft or defense equipment, this term refers to actions by the seller to offset, or compensate the buyer for the economic impact on the buyer from purchasing a foreign-made product. The economic impact that the buyer wishes to have offset normally includes the loss of domestic employment and production opportunities, and the loss of foreign reserve holdings. Offset agreements may involve coproduction, licensing, subcontracting to local firms, counterpurchases, capital investments, export sales assistance, and even promotion of tourism.[3]

3. Because offset agreements can involve nearly all facets of countertrade, some authors, especially those in the U.S. Government, use the term offset as the collective term and include countertrade as a subset.

Clearing Account--This last type of arrangement between two nations avoids the use of currency and tends to balance bilateral trade by establishing accounts in the two countries. Balancing the accounts by trading goods is the primary objective since settling any surplus or deficit remaining after some period of time (usually one to three years) is normally done by importing or exporting additional goods; and only as a last resort is hard currency used.

With the above terminology baseline, it is now possible to study the motives leading to the use of countertrade and then to apply those generic theories to the case of the Soviet Union's trading practices.

II. Possible Motives

In this section the motives leading the Soviet government (or for that matter, any government) to use countertrade are discussed. Why would a government prefer to use these awkward, cumbersome, and apparently inefficient forms of international trade? What objectives are governments pursuing and what desired effects do they see resulting from their choice of countertrade?

In general, the Soviets may become involved with countertrade in two ways. First, in an attempt to correct an economic condition existing in the Soviet Union they may turn to countertrade using it as a blunt instrument of commercial policy. Secondly, in an effort to present herself as a cooperative trade partner for developing nations who request countertrade arrangements, the Soviet Union may agree to go along for political gains.

1. Introduction

To understand the Soviet's involvement with countertrade, it is necessary to understand first some of the possible economic motives of the Soviet Union and her trading partners which would lead to the use of this type of trade. These motives, along with the Soviets' desire to be

a cooperative trade partner should explain much of the Soviets' involvement with countertrade transactions.

Frequently, a nation's use of countertrade can be viewed as a response to the existence of some sort of an economic distortion in the marketplace. In the presence of distortions, governments concerned about national welfare will perceive costs and benefits differently than do private agents. In particular, social costs and benefits frequently diverge from the costs and benefits reflected by market values; thus making it necessary for government to intervene in order to represent social interests. In this case, one can use analysis similar to that developed by Bhagwati, Corden, and Johnson to explain such intervention.[4] Their works deal with the existence of domestic distortions and with government's desire to intervene in order to offset such imperfections, or to pursue various social and non-economic objectives.

In government's undertaking of such intervention, countertrade can be seen as another instrument of commercial policy; thus providing an alternative to tariffs, quotas,

4. See Jagdish Bhagwati, "The Generalized Theory of Distortions and Welfare", Chapter 4 in Trade, Balance of Payments and Growth: Papers in Honor of Charles P. Kindleberger (Amsterdam: North-Holland Publishing Co., 1971); W. M. Corden, "The Theory of Domestic Divergences", Chapter 2 in Trade Policy and Economic Welfare (Oxford: Clarendon Press, 1974); and, Harry G. Johnson, "Optimal Trade Intervention in the Presence of Domestic Distortions", Chapter 4 in Aspects of the Theory of Tariffs (Cambridge: Harvard University Press, 1972).

and tax-cum-subsidy schemes. The criteria developed in the above cited works for selecting the proper instrument focus on the desire to intervene at the point closest to the existing distortion, or nearest to the point of the desired objective. In many instances though, the first-best instrument is not practical, for one reason or another, therefore requiring the use of a second-best or third-best alternative. It is in this light that governments may be seen giving a role to countertrade.

The primary focus of this section will be on those arguments used to justify intervention by a government concerned with maximizing social welfare. Such arguments will generally be based on one of two factors: a recognition that due to market imperfections, private (market determined) benefits and costs are not equal to the social values of benefits and costs; or, the desire to pursue some non-economic objective. In the analysis, an attempt will be made to go one step beyond the mere justification for intervention, by identifying reasons which explain the selection of countertrade as the particular form of intervention.

2. Economic Effects

This subsection addresses some of the economic motives which may encourage a government's use of countertrade.

These motives depend on imperfections which may exist in either factor markets or in financial markets.

A. Factor Market Distortions

Divergences between market values and social values can exist in the markets for labor and capital. These divergences, combined with the attribute of countertrade to conceal certain information, explain possible incentives for a government to use countertrade as a form of intervention.

In correcting for these distortions governments are attempting to do one of two things. First, they may wish to increase the foreign demand for their products--either increasing their exports in general or increasing the sales of specific items. Alternatively, governments may desire to increase investment. In general though, this desire for added investment is a "package deal"--i.e., the government wants the investment in its country to be accompanied by sufficient foreign demand (for the output which results from the new investment) such that the new facility or plant is a viable project from the start.[5]

The case of merely desiring an increase in foreign demand for the country's products is most closely linked

5. The desire for investment alone, without any accompanying demand for the output from the investment, seems to be rare. From the examples found, the normal case is for the offset demanding country to desire some form of new investment accompanied by the demand required to make the investment self-sustaining.

with the labor market distortions discussed below, and can involve either a counterpurchase or an offset agreement. The desire for the investment "package" (investment accompanied by demand) is more closely associated with the capital market distortions and is most frequently accomplished through an offset or buy-back agreement.

(i) Labor

Divergences may exist in the labor market due either to rigidities in the wage rate or to external benefits from employment. A nation may have unemployed labor, but wage rates may fail to respond sufficiently to eliminate the excess supply, due to, say, legal restrictions on minimum wages. The result would be that the marginal private cost of labor exceeds the marginal social opportunity cost of labor. Therefore, from society's perspective, too little labor would be employed.

Another source of divergence in the labor market would be the existence of external effects resulting from certain types of employment. Workers in particular industries may acquire valuable skills that are needed for the country's economic development. The attainment of these skills by the country's labor force might be seen as not only enhancing the country's economic progress but also improving the national pride of the country. Thus, from a social point of view, the social value of labor employed in particular

activities may exceed its private value. In this case, as in the above unemployment situation, social welfare will dictate greater employment levels than market forces will yield.

To encourage greater employment and thus to correct for the above divergences, a government may choose to intervene. Economic theory indicates that the optimal form of intervention would be government's implementation of a factor subsidy designed to encourage the use of the unemployed labor, in the first instance, or the use of the labor in the selected fields, in the second case.

If a direct factor subsidy scheme is not feasible for political reasons, which perhaps might also prevent the use of a second-best production subsidy scheme, then the government may turn to countertrade to achieve the desired subsidy effect.[6] The option of countertrade would offer not only some element of a production subsidy but would also provide the advantage of reduced visibility; i.e., it is a subsidy given to production activities which employ certain

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6. For example, countries may attempt to increase the employment of idle labor by shifting their industries' production emphasis from primary products toward the production of goods with a greater labor content or a greater amount of domestic value added. This diversification could be encouraged by the use of direct subsidies, either to exports or to production. International reaction or domestic political constraints, though, may prevent the use of such direct subsidies. As an alternative, the government can use counterpurchase agreements to hide the effective subsidy to exports from selected industries. These agreements would call for western suppliers to counterpurchase goods from the selected industries.

desired skills but is less visible than the more direct forms of support. Because of this reduced visibility, and because of the fact that the subsidy would be "packaged" with benefits for the domestic economy (production and jobs) the countertrade instrument might be more acceptable from a political viewpoint.

An example of the above use for countertrade is observed in the use of offset agreements. Foreign governments, wishing to stimulate their domestic employment, in general or in selected fields, can request that the selling firms which are providing defense equipment, agree to certain coproduction and subcontracting arrangements. These arrangements direct that a portion of the production effort be accomplished in the local economy. In particular, certain components or tasks for advanced technology aerospace, and electronics projects would be produced in, or performed by industries in the buyer's country. These offset provisions should increase domestic employment, particularly in the selected skills, since without the countertrade requirements these portions of the projects would probably be produced in the sellers' countries.

Besides the use of complex offset agreements to correct for labor market distortions, more simple counterpurchase agreements may also be used. While offsets are generally used more with respect to high technology projects, thus being more appropriate for capturing the external benefits

associated with certain skilled jobs, counterpurchase agreements can also be used to encourage the employment of labor. These counterpurchase agreements call for the selling firm to buy, or find buyers for, local goods, equal to a certain percentage of the initial sale. These counterpurchases may involve general, unspecified, purchases or they may be targeted to certain regions or industries. Local employment in general, or in certain regions or industries, may thus be encouraged by the purchases.

Both the counterpurchase and the offset transactions allow the government to subsidize production levels, and thus, indirectly, to encourage the use of unemployed labor. Unlike the direct factor or production subsidies, though, the counterpurchase agreements are more concealed forms of subsidization. By this "beggar-thy-neighbor" policy, the government hopes to win increased sales for its products away from other countries' producers. It is an indirect subsidy to the domestic firms since the foreign suppliers can be expected to increase their prices in order to recover their costs of marketing, or absorbing, the counterpurchased goods.

The above described uses for offset and counterpurchase agreements to correct for labor market distortions by increasing demand for domestic products (i.e. a non-first-best manner of intervention) have one final consideration that should be mentioned. If the countertrade agreements do

in fact result in added stimulus to the buyer's domestic economy, the additional revenue generated for the national treasury may offset all, or part of, the cost of the hidden subsidy.[7] Should this be the result, the government could consider its efforts to be successful; it would have obtained the intended subsidy, at little or no net drain on the treasury, while satisfying the political constraints through concealment.

(ii) Capital

The market for capital equipment might also be characterized by a divergence between market and social values. This divergence could be caused by institutional factors (e.g. interest rate ceilings) or by externalities.

For example, a country may perceive that the acquisition of certain capital equipment and the gain of modern industrial capacity provide the opportunity both to improve the labor force's skill level, and to enhance the nation's self-esteem and its standing in the world community. Since newly acquired capital has, therefore, a social value in excess of its private cost, government intervention is justified. Without government involvement, the level of investment will be too little, since private

7. The stimulus referred to here is that which would occur from a foreign purchase made with countertrade provisions (the stimulus coming from the countertrade provisions) vis-a-vis a foreign purchase with no countertrade provisions.

agents, responding only to private marginal benefits and costs, will invest less than the social optimum.

To correct for the divergence and increase investment to the socially desirable level, the first-best policy is for government to subsidize firms' investment activities. However, such a subsidy scheme, with payments going to firms undertaking new capital projects, might prove politically unpopular due to resistance both from some other firms who felt they were "left out," and from workers.

As an alternative to the direct subsidization scheme, the government may turn to countertrade in order to promote investment in the country. Through the use of an offset agreement on, say, a large defense purchase, the government can stipulate that the selling firm must invest some portion of its revenues from the sale, in the purchasing country. The investment requirement most likely will also stipulate that the selling firm provide some demand for the output from the new investment--thus insuring the project's viability at least for a time. In so doing, the government can use its market power as a purchaser to win the desired increased investment while avoiding the political sensitivity of a direct subsidy scheme, thus making the subsidy effect less visible.

The seller in such an agreement, if allowed by market conditions, can increase its price to recover its added costs from the mandated investment (thus the subsidy is

still paid for by the purchasing government). If, though, market conditions do not allow a price increase to capture the investment costs, the cost of the subsidy will be borne in part by the seller.[8] Finally, under other circumstances, the seller may actually add to its profit position. This might occur if the foreign government's desire for investment is so strong that it allows the seller to enter into lucrative investment ventures which would otherwise have been closed to outsiders. These possible effects on the seller, resulting from the countertrade transaction, are in contrast to those of the direct subsidy scheme, which would be expected to have little or no effect on the seller.[9]

B. Distortions in Financial and Other Markets

Financial markets are also imperfect, thus inviting some form of government intervention. In addition, since risk and uncertainty, and the availability of information, are closely related to the functioning of financial markets, these topics will also be discussed here.

8. Perhaps this is a case where the purchasing government has used its monopsony power to extract some of the monopoly profits of the seller.
9. However, the seller might benefit from the foreign government's direct subsidy scheme if the seller located some of its activities in the foreign country and thus received some of the subsidy's benefits.

(i) Foreign Exchange

If distortions exist in the foreign exchange market a role may exist for countertrade. Conditions in the domestic economy may be such that the price of foreign exchange (the exchange rate) may be distorted.[10] In the case where these distortions result in the shadow price of foreign exchange exceeding its market price (as reflected by the existing exchange rate) the country may benefit from an increase in exports and an increase in foreign exchange earnings.

One way to increase exports is for the government to offer direct export subsidies to domestic firms. However, with the GATT policy against the use of export subsidies, the government may search for an alternative policy; or at least one in which the subsidy is more difficult to detect. Therefore, the government may turn to countertrade. A counterpurchase agreement which required foreign suppliers to purchase a specified amount of local goods, (in return for the sales these suppliers were able to make), is actually a disguised subsidy scheme. Since the foreign suppliers could be expected to raise their prices (market conditions permitting) to cover the additional costs incurred in disposing of the counterpurchased goods, the

10. The foreign exchange market may be distorted due to the presence of tariffs, quotas, or other sorts of controls. See Robin W. Boadway, Public Sector Economics, (Boston: Little, Brown and Co., 1979) p. 184.

government could be viewed as indirectly subsidizing exports of its domestic goods.

Alternatively, the government's use of counterpurchase agreements could be viewed as reducing imports (relative to exports) in order to conserve valuable foreign exchange. This results from countertrade's arrangements which link imports to exports. Thus, if the nation is experiencing a trade deficit, countertrade would tend to reduce the outflow of foreign exchange by bringing imports more in balance with exports.

Since the above arrangements have the effect of reducing the relative price of the nation's exports and increasing the relative price of its imports, the use of countertrade can be seen as having the same effects as a devaluation (at least for selected goods)--without the visibility and adverse political ramifications that would accompany a devaluation of one's currency. In this way the government can intervene with a countertrade policy to correct a disparity between the shadow price of foreign exchange and the price reflected in the market exchange rate.

(ii) Financing

A condition of imperfect capital markets might lead to the need to find alternative sources of financing. Due either to situations in which credit is rationed, or to

existing large debt levels, access to normal credit sources may be restricted.[11] In response to the lack of credit, countries can turn to buy-back agreements to obtain needed financing. Such agreements allow economies with poor credit ratings to finance the construction of large plants, using the resulting output from the plants as payment. This financing arrangement is in kind rather than in monetary terms, since the seller of the facility agrees to accept a portion of the resulting output as his payment for the goods and services provided.

Similarly, in-kind financing may be used to obtain imports of needed products and raw materials, when normal credit lines are restricted. With counterpurchase and barter agreements, the buyer, possessing some degree of market power, can arrange to make payment for its imports by offering goods to its suppliers.

The above arrangements would be most likely to occur in instances where, not only are credit markets distorted, but sellers also experience a temporary lull in demand for their goods or services. Under these conditions, the suppliers are offering a form of seller-financing which could be seen as a method of disguised price cutting. In some instances, the buy-back arrangement might have additional benefits for

11. For a discussion of some of the problems debtor nations have experienced in obtaining credit in previous years, see S. Karene Witcher, "Spreading Problem: Small Debtor Nations Find Loans Harder to Get, and Consequences May Prove Serious", Wall Street Journal, 13 July 1983, pp. 1, 20.

the seller. The deal may offer the seller a long term reliable source of supply of some useful product or input.

(iii) Risk and Uncertainty

Risk and uncertainty can often be offset through the use of futures markets. Yet, since such capital markets are incomplete or are totally absent in developing countries, other methods may be sought to reduce risk exposure.

The uncertainty and risk from changing currency values and prices may motivate the use of countertrade. For example, since the end of the Bretton Woods system, exchange rates of some of the major currencies have experienced a significant degree of volatility and uncertainty.[12] To reduce the risk involved with uncertain future currency values, and to lessen price uncertainty, barter agreements may be used. By trading fixed quantities of goods and thus avoiding the valuation of the goods in terms of either of their domestic currencies, the parties can assure themselves of fixed terms of trade (at least with respect to the specific goods being traded).

Reduction in risk exposure may also be an explanation for the frequent use of countertrade by the centrally planned economies. Countertrade has long been practiced in

12. See M.A. Akhtar and R. Spence Hilton, "Effects of Exchange Rate Uncertainty on German and U.S. Trade", Federal Reserve Bank of New York Quarterly Review, Spring 1984, pp. 7-16; and, Edward M. Bernstein, "Do We Need a New Bretton Woods?", Finance & Development, September 1984, pp. 5-7.

the non-market economies of the Eastern Bloc since this form of trade meshes nicely with their government-directed targets pertaining to export performance and import entitlements. Since their targets are often in terms of physical quantities, counterpurchases can be useful in locking in the desired imports and exports, thus enhancing the probability that the targets will be met. Government's involvement with the centrally planned economy's countertrade transactions is a reflection of the priority those imports and exports carry in achieving the plan's fulfillment. From the government's perspective, the social value of those imports and exports exceeds their private market values.[13]

Lastly, the risk involved with designing, building and starting-up a new production facility, and the uncertainty of markets for its output, can be lessened through buy-backs. Since the builder (selling firm) is committed to buy at least some of the resulting output, he will take additional interest in the quality of the production and in finding a prompt solution to any problems that should arise. This, combined with the assurance of export markets, lessens

13. This illustration could also be included under the forthcoming "Strategic Goods" heading in which a possible distortion in the product market exists. But, because of the government's desire to reduce the risk of not meeting its targets, this illustration is included under the "Risk and Uncertainty" heading.

the uncertainty for the buyer government and shares the risk of the project with the seller.

(iv) Information

Distortions in the market for information may also motivate governments' use of countertrade. The distortions arise from the existence of external effects and from the lack of perfect information.

One example of this is a government's use of its bargaining position to obtain an offset agreement from a large defense supplier. The government can stipulate that the foreign supplier share its marketing information and expertise with the less experienced and relatively unknown domestic firms, in order to win sales for them in previously uncharted foreign markets. The government's action is needed, first to reduce transaction costs over those that would be incurred if each of the firms sought the marketing assistance individually, and, secondly, to capture the social value of the information and initial sales. The social value of the initial sales and marketing experience obtained through the offset agreement exceeds its private value since the experience and reputation gained will aid other firms in winning future sales.

Another example of how an information asymmetry can explain the use of countertrade involves the desire by governments to obtain the latest technologies for their

domestic industries. In the countertrade agreements the governments can require that the foreign suppliers transfer to local firms certain advanced production technologies, which would enable domestic firms to improve their productivity and to diversify their outputs.

3. Political Effects

Numerous reasons for the use of countertrade can be loosely grouped under a heading of political, or perhaps, non-economic motives. This subsection will explore some of these political objectives. Although economic arguments might also be made to justify some of the motives discussed below, they are included under this non-economic heading to reflect the fact that political considerations appear to dominate.

A. Strategic Domestic Industries

Government intervention is often undertaken to promote certain domestic industries. Very often, for national security and political independence reasons, the chosen industries are producers of defense equipment. While a first-best instrument to achieve this non-economic objective is a production subsidy, such a policy may not be available for political reasons (for example, the controversy that would likely accompany direct subsidies to defense firms).

Therefore, a second-best instrument, such as countertrade (which also offers concealment), might be used.

Government's use of countertrade could achieve the objective while offering political advantages as well. As part of an agreement to purchase defense items from a foreign supplier, a government can use its market position to require that the supplier allow coproduction, or place a certain percentage of the applicable subcontracts, with local defense firms. While the countertrade agreement would gain the desired defense work for domestic firms, it would make the subsidy to those firms less visible, and thus possibly more acceptable from a political perspective. In addition, to the extent that both the defense industry promotion and the foreign defense purchase were controversial issues, the two could be "packaged" together to avoid having two separate national debates and to use the economic stimulus and employment benefits to dampen the domestic controversy.

B. Strategic Goods

In an argument similar to that in the above subheading, a government may use a countertrade agreement to win domestic support for a decision to purchase a costly foreign-made defense item.[14] Expecting resistance from

14. This subsection differs from the one above in that here a particular item is to be supported rather than a particular industry.

parliament members, other ministries, and from taxpayers in general, defense officials may require the foreign supplier to agree to counterpurchase, to coproduction, and to other offset arrangements, so that the domestic economy is seen as sharing in the benefits generated by the defense purchase. Therefore, the required domestic political support is obtained by "packaging" the defense purchase with the employment and production opportunities.

To the extent that the countertrade requirements do in fact generate enough domestic stimulus to offset some of the cost of the defense equipment, the government will have used its market power as a buyer to win an effective cost reduction, while achieving the desired political support. On the other hand, if the offset stimulus is only nominal (i.e. the counterpurchases and coproduction would have occurred anyway), then no true cost reduction will be enjoyed. Instead, the government uses the countertrade deal only to create "smoke" (by "packaging" the purchase with the perceived additional benefits), which allows it to procure something which, in its eyes, has a social value greater than the value perceived by private agents.

C. Concealment

A third subgroup of non-economic/political motives is a broad one, and elements of it can be seen in most other

examples of countertrade: the desire to conceal information about transactions.

Countertrade's ability to hide information can have many uses, such as: hiding price reductions so as not to offend previous, full-price paying buyers, thus enabling the practice of price discrimination; and concealing forms of trade protection, thus avoiding retaliation. In addition, one of the more frequently cited uses for countertrade in the early to mid 1980s was that of cartel price cheating.[15] To avoid breaking with the cartel, a member may use barter or counterpurchase arrangements to conceal its price reductions. Anticipating that a price cut below the cartel-imposed minimum will increase its sales until the point where marginal social benefit and marginal social cost is equalized, the member may be drawn to countertrade. Both barter's avoidance of the use of money and counterpurchase's ability to buy back goods at above-market prices (reducing the relative price of the cartel-controlled item through the hidden rebates), enable the cartel member to conceal its price cutting behavior.

A less obvious political motive for the use of countertrade to hide price reductions, involves a government

15. For examples of OPEC's use of countertrade see: Youssef M. Ibrahim, "Crumbling Cartel OPEC's Old Iron Grip On World Oil Prices Becomes Ever Weaker", The Wall Street Journal, 11 Jan. 1985, pp. 1,9; and, "Oil-for-Planes Accord Is Likely For UAE, France", The Wall Street Journal, 1 Oct. 1984, p.37.

which is faced with a falling world price for its primary export. Wishing to conceal from its populace the politically unpopular fact that the country faces difficult economic times ahead (and thus to buy an element of survival for the current administration), the government may resort to barter and counterpurchase agreements. As above, these transactions would allow the sale of the goods at the approximate world price, but would make the effective price which is received difficult for domestic residents to evaluate.

Another use of countertrade's ability to conceal information occurs when a debt-ridden country must implement an austerity program. By imposing rigid countertrade demands on its trading partners, it can reduce its imports, and its standard of living, and blame the ill effects on "uncooperative" partners. This would have the politically beneficial effect of redirecting public unrest away from domestic leaders and toward certain "foreign elements."[16]

Lastly, governments facing international debt problems and thus receiving close scrutiny from foreign creditors,

16. The economic effects in this example are very similar to those suggested in the "Foreign Exchange" discussion above. It has been suggested that one of Indonesia's motives for its countertrade policy announced in 1982, might have been the desire to slow the flow of imports and to delay government outlays for major projects. See: "Indonesia is Sticking to its Guns-for-Butter Principles", Far Eastern Economic Review, 27 Jan. 1983, p. 50; "A Return to Barter", Far Eastern Economic Review, 27 Aug. 1982, p. 41; and "Countertrade and Barter", Office of the U.S. Trade Representative, 1983 (Mimeographed) p. 5.

may use countertrade to obscure information about the actual value of their liabilities or of their export earnings. By agreeing to pay for goods and capital equipment in kind rather than in cash, (through barter or buy-back arrangements), the government can conceal the true value of liabilities. Similarly, if greater earnings are expected to lead to creditors' demands for faster debt repayment, the government can make export earnings more difficult to detect, or to evaluate, by agreeing to accept payments in kind.

D. International Integration

A final political objective leading to governments' use of countertrade is to influence international relations--in particular, to build closer ties with certain trading partners. Long term countertrade deals between nations are thought to be signals of a close relationship between the two partners and may be complementary to a political alliance, to other institutional arrangements between the nations, or even to efforts to promote a degree of regional economic and political unity.[17] Thus, by using countertrade arrangements, governments may attempt to show signs of a strong political and economic link with certain partners.

17. See Ingelies Outters-Jaeger, The Development Impact of Barter in Developing Countries (Paris: Development Centre of the Organisation for Economic Co-operation and Development, 1979)

III. Soviet Applications[18]

The economic theory discussed in Section II along with the terminology baseline of Section I can now be used to analyze the motives leading to the Soviet Union's involvement with countertrade. Specifically, we ask the question: are the theories presented above adequate to explain recent Soviet countertrade practices? And, if not, what theories do explain current Soviet motives?

One possible hypothesis is that the theories above explain many of the motives leading to the countertrade demands of the trading partners of the Soviet Union (e.g., to gain alternative forms of financing, to obtain marketing assistance, to conserve hard currency reserves, to meet centrally directed export targets, to subsidize certain industries, to encourage investment activities, or to employ excess labor) and that the Soviet Union cooperates for political gain. That is, the Soviets' willingness to participate in countertrade activities is designed to make the trade partner economically and politically dependent on the Soviet Union.

A second hypothesis is that the above theories explain some of the economic and political motives of the Soviet

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18. This section is based on a review of material provided by The Defense Intelligence Agency.

Union herself--i.e., her desire to gain marketing assistance, to conserve hard currency, to gain technology, or to strengthen political ties.

After having reviewed an extensive body of message traffic reporting countertrade transactions/arrangements between the Soviet Union and her trading partners (the majority involved LDCs), both of the above hypotheses are supported. In addition, the economic and political motives of Section II seem to explain all the anecdotal data provided in the message traffic.

In the following discussion, several of the possible motives of Section II will be aligned with the reported countertrade transactions. Names of the trading partners are omitted in order to avoid sensitive information.

<u>MOTIVE</u>: The marginal social value of capital exceeds the marginal private value of capital; therefore government uses countertrade deals to increase investment expenditures to the socially optimal level.

<u>OBSERVATION</u>: The Soviets use barter, buy-back and counterpurchase requirements, as well as long term oil/gas sales agreements to obtain large scale plants and the associated technology and managerial skills to run them. Joint development efforts with Western firms, sometimes involving buy-back arrangements, are intended to obtain technology as well as capital investments and infrastructure

in specifically targeted industries or areas (for example, in the Soviet Far East).[19]

MOTIVE: A shortage of hard currency may be caused by a government induced distortion in the foreign exchange markets such as the lack of convertibility of one's currency. Countertrade deals may be used to conduct trade when a shortage of hard currency exists.

OBSERVATION: Both the Soviets and many of their trading partners suffer from a shortage of hard currency. Therefore, to conserve this scarce currency, many of the trading arrangements between the Soviet Union and the LDCs are bilateral trade agreements which avoid the use of hard currency.[20] Instead, these arrangements often have counterpurchase requirements, or are straight barter deals. Using these types of transactions, the Soviets are able to obtain needed consumer, agricultural, and industrial goods without expending scarce hard currency.[21] When it is the

19. See for example, "Soviets Planning Economic Zones To Draw More Foreign Investment", Wall Street Journal, May 2, 1989, p. A3.

20. Press reports often emphasize the Soviets' desire to conserve, and to earn whenever possible, hard currency. See for example Peter Gumbel and Adi Ignatius, "Border Crossing", Wall Street Journal, May 12, 1989, pp. 1, A8, and, "Soviets Won't Curb Exports Paid For in Hard Currency", Wall Street Journal, January 6, 1989, p. A6.

21. It is interesting to note that the Soviets are selective in their use of countertrade. If they are selling highly sought after military items they often require cash payment. However, if the items which they are selling are generally available elsewhere, then the Soviets are more willing to accept payment in-kind.

LDC that is most concerned about its hard currency reserves, the Soviets perhaps accept payment-in-kind, rather than preferred hard currency, in order to be a cooperative trade partner and to enhance political and economic ties with the LDC.

MOTIVE: Closely related to the currency motive above is one based on the LDC debt problem. Due to high levels of foreign debt owed by many developing countries, these and other LDCs are unable to obtain additional credit to finance needed imports.

OBSERVATION: Many of the Soviets' trading partners are LDCs which either have heavy debt loads themselves or are placed in a "high risk" category by lenders, based on their identity as an LDC. In either case, these countries face difficulties in obtaining credit to finance needed imports. Countertrade arrangements between these LDCs and the Soviets provide an alternative financing option to sidestep balking Western lenders; i.e., the LDCs pay for their imports with the proceeds from their exports via counterpurchases, barter, or clearing account arrangements. In fact, the Soviets' willingness to accept payment-in-kind from some LDCs to accommodate the LDCs' shortage of credit extends beyond financing for current purchases to several instances where the Soviets are willing to accept this type of payment for settlement of past debts.

MOTIVE: Bilateral trade arrangements as well as countertrade agreements offer trade partners the opportunity to reduce risk and uncertainty in a variety of ways.

OBSERVATION: Risks for exporting countries, especially those exporting raw materials, arise from the volatility of prices and from the uncertainty of demand for their exports. Both of these sources of risk can be lessened through countertrade. The Soviets are willing at times to enter into long term agreements to buy LDCs' products at set prices, thus giving the LDCs assurance of a certain level of demand at a stable price which, in turn, results in more reliable export earnings. In addition, the Soviets are assured of a stable supply of certain materials. This arrangement is particularly supportive of centrally planned economies' efforts to meet export and import targets--thus reducing their risks of not meeting government set targets. The Soviets are also eager to ensure the success of major projects, such as the Soviet gas pipeline. Bilateral arrangements ensure the level of demand necessary to make such projects a success.

MOTIVE: Information, relating to either marketing or production, is a valuable (and often vital) commodity. Countertrade arrangements offer novel ways for countries to

correct what are perceived to be situations of asymmetrical information.

OBSERVATION: Both the Soviets and many of the LDCs, wish to find new markets for their exports, and to get their products better known. In order to break into new markets and to win recognition for their products these nations employ counterpurchase arrangements. In return for buying one nation's goods the buyer can obtain marketing assistance by requiring the seller to counterpurchase some of the buyer's goods or to find third party buyers for these goods. In this manner, the goods receive exposure in new markets which hopefully results in follow-on sales in the future. In other instances one of the trading partners desires to obtain new technologies or managerial skills. If the partner desiring the information is the LDC then the Soviets often accommodate the LDC's desire in order to build political goodwill. If the partner seeking the information is the Soviet Union, then a barter, buy-back, or coproduction deal may be used to obtain the desired knowledge.[22]

While the above two instances involve efforts to use countertrade to obtain information, countertrade also offers

22. The strong Soviet desire to gain management skills is shown by their entry into management training agreements with Western firms. See for example "Soviet Construction Aides to Get Business Training", Wall Street Journal, June 1, 1989, p. C6. The Soviets are even more pleased if this training can be obtained via countertrade deals, without using hard currency.

the Soviets and their trading partners a method to conduct trade while concealing from third parties some of the details of the trade arrangement. For example, the path of some high technology goods, routed through an LDC, bound for the Soviet Union may be difficult to trace when it is done via a complex countertrade deal. Or, cooperation in a countertrade deal which was requested by an LDC, may be the reward given by the Soviets to the LDC when it helps divert sensitive goods to the Soviet Union. In addition to these cases, the Soviets may use countertrade deals to conceal the actual prices being charged for goods as discussed below.

MOTIVE: In lieu of a direct subsidy, countertrade arrangements can be used to promote key or strategic domestic industries.

OBSERVATION: In countertrade agreements, the Soviets have identified certain goods and services which their partners are encouraged to counterpurchase. In this manner, the Soviets promote the growth of certain key industries, and thus indirectly subsidize those industries which produce such items as ships, tractors, medicines, electronic equipment and even those which are involved with launching satellites. In the reverse case, where it is the Soviets' partners that desire to promote certain industries, the Soviets are likely to accommodate the requests (i.e. to

counterpurchase the partners' items thus supporting the partners' industries) in order to enhance political ties.

<u>MOTIVE</u>: Counterpurchase agreements, in particular those involving offsets and coproduction arrangements, can be used to make large purchases from a foreign supplier more palatable to domestic industries and taxpayers.

<u>OBSERVATION</u>: Although no specific instances of the Soviets' use of countertrade to achieve this particular motive were found in the available literature, it is quite conceivable that in cases where Soviet trading partners are purchasing costly Soviet items, such as defense equipment, the purchasing governments may request that their industries be allowed to produce some of the items. That is, realizing that the purchase of the Soviet-made item involves the creation of many jobs, the purchasing government could require, as part of the purchase contract, that the Soviets allow the purchasing nation's industries to produce part of the items, or at least that they receive some sort of offsetting business from the Soviets. (This practice of granting offsets seems to be very common in the West and there is no reason to doubt that it also exists in Soviet trade.)

<u>MOTIVE</u>: The complexity of countertrade arrangements offers an excellent opportunity to conceal the actual or effective prices for certain goods.

<u>OBSERVATION</u>: The Soviets are a major producer of petroleum. Although they are not a member of OPEC, they do not wish to strain relations with OPEC's members by openly undercutting the cartel's price. Therefore, the use of complex countertrade agreements allows the USSR to offer price breaks on its oil while making its pricing behavior less obvious.

<u>MOTIVE</u>: Countertrade agreements, being more complex than normal cash transactions, can be used to build closer ties with trading partners

<u>OBSERVATION</u>: All international trade, in whatever form, has a tendency to enhance political and economic ties between the partners. Countertrade transactions, because of their uniqueness and complexity, and because they often are in response to some particular problem (such as a heavy debt load, a need to find new markets for goods, or a shortage of hard currency) are especially useful in building closer economic and political ties between two nations. The Soviets have used these types of transactions to enhance their relationships with the Third World. As an example, in one instance, to help the development efforts of a struggling LDC client state, the Soviets arranged for the

construction of a chemical plant, to be built in the LDC, but paid for by Soviet oil.

In conclusion, from the above discussion, which was based largely on a review of available message traffic, the motives discussed in Section II appear to explain reasonably well the Soviets' involvement with countertrade. No single motive can be used to explain Soviet behavior; rather, several desired economic and political effects lead to the use of countertrade by the Soviet Union and her trade partners.

TRENDS: Since many of the factors that have led to the use of countertrade are projected to continue, it seems reasonable to expect that the Soviets will continue to be involved with this form of trade. That is, as the LDCs, as well as the Soviet Union herself: continue to experience shortages of hard currency and to face debt related problems while at the same time desiring to improve their nations' standard of living; or, feel the need both to narrow the technological and managerial gaps with the West and to add to their infrastructure, then countertrade-type transactions are likely to remain in common use. On the other hand, as the Soviets attempt to restructure and to streamline their economy and to interest more Western firms in trading with

the USSR, they may have to decrease their countertrade demands. Thus we see two somewhat conflicting forces at work with respect to the Soviets' involvement with countertrade; however, it appears from the available anecdotal data that the Soviet Union will continue to employ and to cooperate in countertrade transactions for the foreseeable future. Accepting this, a grasp of the motives behind the use of this type of trade enables us to understand better the behavior of the Soviet Union.